

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney

A United Technologies Company

June 27, 2002



RDMS DocID 00100460

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement & Remediation Division
79 Elm Street
Hartford, CT 06106-5127

Pratt & Whitney
CTD990670081
R-9
RDMS # 100460

Attn: Richard C. Hathaway, Jr., L.E.P.

RE: CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002

Dear Mr. Hathaway:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

Sincerely,

UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION

Lorin Sodell
Chief Manufacturing Engineer
Director, Facilities & Services

Attachment

cc: Lauren Levine, UTC
Brian Cutler, LEA
Juan Perez, EPA



Loureiro Engineering Associates, Inc.

June 27, 2002

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement and Remediation Bureau
79 Elm Street
Hartford, CT 06016-5127**

Attn: Richard C. Hathaway, Jr., L.E.P.

**RE: CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002**

Dear Mr. Hathaway:

In accordance with Paragraph B.2 of the above referenced Consent order, attached please find the progress report for the period from April 2002 to June 2002. This progress report includes a summary of those actions completed at the site as defined in Paragraph A.2 of SRD-130. In accordance with Paragraph B.8 of the above referenced Consent order, I hereby certify that:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

If you should have any questions or comments, please contact me or Lauren Levine of United Technologies Corporation at (860) 728-6520.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Brian A. Cutler, P.E., L.E.P.
Vice President

Attachment

CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
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PRATT & WHITNEY DIVISION
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1. DESCRIPTION OF ACTIVITIES

In accordance with Paragraph B.2 of the above referenced Consent Order, this progress report has been prepared to summarize those activities that have been completed during the period from April 2002 through June 2002. As appropriate, this progress report also includes tables, figures, and drawings to support the following text. The description of activities is presented below in the same manner as presented in the Remedial Action Work Plan for the project.

1.1 Pre-construction activities

All pre-construction activities were completed prior to this reporting period. Pre-construction activities included Project Permits and Approvals and Engineering Design. More detailed information can be found in previous quarterly reports.

1.2 Construction Activities

Construction activities were initiated at the site on July 2, 2001. The following is a summary of the construction activities completed during this reporting period. A Site Plan depicting remediation areas discussed in the following parts of this Section is provided as Attachment No. 1. A final Site Plan depicting remediation areas discussed in the following parts of this Section is currently in progress and will be provided in the final summary report upon completion of the project.

1.2.1 Site Preparation

All site preparation activities were completed prior to this reporting period. More detailed information can be found in previous quarterly reports.

1.2.2 Demolition and Removal of Existing Structures

Demolition and removal activities completed during this reporting period consist of the removal of an overflow structure and wet well (DSN 003), associated with the former Process Water Facility, located east of the Oil Basin in the Lower Pond Area. Also, beginning on April 17, 2002, various sections of steel sheeting were removed that were located in the east and west ends of the Lower Pond. These materials were sampled for disposal characterization and disposed of offsite.

1.2.3 Contaminated Soil and Sediment Excavation and Offsite Disposal

Upper Pond (Remediation Areas 01 through 03): The excavations in the Upper Pond were completed during the reinstallation of the 108-inch reinforced concrete culvert in the eastern end of the Upper Pond. Excavation of soils within Area 01 and Area 02 in the vicinity of the Upper Pond was initiated on April 09, 2002. During this reporting period 509 cubic yards (611 tons) of

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contaminated soil was excavated from Area 01, located east of the Upper Pond, and 517 cubic yards (620 tons) was excavated from Area 02, and removed from the site. All of this soil contained greater than 50 ppm total PCBs.

Confirmatory sampling and field (immunoassay) screening techniques were conducted throughout the excavation activities in the Upper Pond. The results of field screening resulted in the determination that contaminated soil in the Upper Pond extended laterally beyond the limits initially delineated by pre-remediation soil and sediment sampling. Confirmatory sampling and analysis through a fixed analytical laboratory was also conducted within the Upper Pond. The analytical data for the final confirmatory sampling performed in the Upper Pond is provided in Attachment No. 2. Following receipt of confirmatory data indicating that the remediation goal of less than 25 ppm PCBs was achieved, on April 12, 2002, backfilling of the Upper Pond was initiated.

Oil/Water Separator (Area 04): The Oil/Water Separator was previously located in the land bridge between the Upper and Lower sections of Willow Brook Pond. No excavation activities were performed during this reporting period. It should be noted, a portion of the diversion channel installed to divert flow around Willow Brook and Willow Brook Pond was located along the southern limits of Area 04. Sampling to characterize the north and south banks of the diversion channel was initiated on April 17, 2002 and was completed during this period. The analytical data for the final confirmatory sampling performed in the Oil/Water Separator is provided in Attachment No. 2. Backfilling and restoration in this area is ongoing.

Lower Pond (Remediation Areas 05 through 11): Excavation of soils from the Lower Pond was initiated on April 26, 2002, along the southern side of the temporary sheeting in Area 09. In addition, soil remediation of the former "oil basin" located in Area 07 was completed. The earthen berm, which differentiated the oil basin from the Lower Pond was remediated as well due to the presence of PCBs in excess of 50 ppm. During this reporting period, 2,588 cubic yards (3,107 tons) of contaminated soil was excavated from the Lower Pond areas and removed from the site. Approximately 1,374 cubic yards of this soil contained less than 50 ppm total PCBs, while the remainder (1,214 cubic yards) contained greater than 50 ppm total PCBs.

Confirmatory sampling and field (immunoassay) screening techniques were conducted throughout the excavation activities of the Lower Pond areas. The results of field screening resulted in the determination that contaminated soil in the Lower Pond extended laterally beyond the limits initially delineated by pre-remediation soil and sediment sampling. Confirmatory sampling and analysis through a fixed analytical laboratory was also conducted within the Lower Pond areas. The analytical data for the final confirmatory sampling performed in the Lower Pond areas is provided in Attachment No. 2. Following receipt of confirmatory data indicating that the remediation goal of less than 25 ppm PCBs was achieved, on May 24, 2002, backfilling within the former oil basin and capping of the Lower Pond was initiated.

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Stream Channel and Wetlands (Remediation Areas 12 through 15): Excavation of soils from the Stream Channel and Wetlands was initiated on January 15, 2002, in Area 12 and continued into this reporting period. During this reporting period, 334 cubic yards (405 tons) of contaminated soil was excavated from the Stream Channel and Wetlands and removed from the site. All of this soil contained greater than 50 ppm total PCBs. The restoration of the Stream Channel and Wetlands was completed on April 11, 2002.

1.2.4 Construction Dewatering

As discussed in previous progress reports, dewatering of nearly all remediation areas was determined necessary to allow for the removal of soil and sediment containing PCBs at concentrations greater than 25 ppm. During this reporting period, dewatering systems located in the Stream Channel, Wetlands and the Lower Pond areas were utilized with the treatment system formerly referred to as the "wetlands treatment system". The majority of the remediation and restoration activities in the Stream Channel and Wetlands areas were complete by early April. As such, the dewatering facilities associated with the Stream Channel and Wetlands areas were dismantled and shutdown on April 3, 2002. However, construction dewatering was initiated for the remaining remediation in the Lower Pond (the southern bank in Area 09, Area 07, and the southern and western portions of Area 08) was initiated on April 8, 2002. The treatment of the groundwater generated during dewatering of these areas was treated through the treatment system previously devoted to the Stream Channel and Wetlands.

Stream Channel and Wetlands (Remediation Areas 12 through 15): As previously stated, the system for dewatering activities in the Stream Channel and Wetlands was shutdown on April 3, 2002. Discharge monitoring was completed during the reporting period in accordance with the DEP issued Emergency/Temporary Authorization (EA). The permit compliance monitoring data for the dewatering system is presented in Attachment No. 3.

Lower Pond (Remediation Areas 05 through 11): Discharge from this dewatering system to the Colt Street Wastewater Treatment Facility was initiated on April 8, 2002. The use of this system was discontinued on June 4, 2002. Discharge monitoring was completed during the reporting period in accordance with the EA. The permit compliance monitoring data for the dewatering system is presented in Attachment No. 3. Portions of the treatment system will be used in the future for decontamination wastewater treatment.

1.2.5 Pond/Stream Channel Cap and Engineered Control

During this reporting period, the installation of the soil and stone cap was completed in the Stream Channel. Other areas of the site where a cap was installed during this reporting period include the south bank of the Lower Pond (Areas 8 and 9) and on the north and south side of 108" RCP outlet in the Upper Pond (Area 2).

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1.2.6 Site Restoration

During this reporting period, the restoration activities were initiated for the 108" RCP in the Upper Pond. The previously removed pipe sections were reinstalled and backfilled. The restoration of the Stream Channel shoulders that was initiated during the last reporting period was completed on April 11, 2002. These activities included fine grading, topsoiling and raking.

The restoration activities for the Wetland Area were initiated on April 19, 2002, as the biologists, which surround the perimeter of the marsh, were installed. Connecticut DEP personnel, Melissa Toni, visited the site to observe the progress of the restoration activities. Ms. Toni indicated the need for weed control in certain locations throughout the site. This activity was completed. On May 9, 2002 wetland and upland shrubs and trees were planted in the Wetland Area and along the Stream Channel banks. The willow stakes were then installed and the banks of the Wetland, Stream Channel, and Upper Pond were hydroseeded in accordance with the requirements of the permits issued by the Army Corps of Engineers and the DEP Inland Water Resources Division. On May 14, 2002 the wetland plants were installed behind the biologists and the bottom of the wetland was seeded and planted with emergent plants. The north and south banks of the Lower Pond were hydroseeded on June 11, 2002, following the placement of topsoil and rip rap along the banks of this area.

Mr. Richard Hathaway (CT DEP) visited the site on May 14, 2002 to observe the restoration and wetland mitigation activities. Mr. Juan Perez (EPA) similarly visited the site to observe the project status on June 13, 2002.

An aerial survey of the site was performed by Golden Aerial Services, Inc. on April 7, 2002. The survey was performed to document the contours within the pond, stream and wetland areas prior to reintroducing water flow therein.

1.2.7 Disposal Characterization Sampling

A total of 1 disposal characterization sample was collected and analyzed during this reporting period. At sample location, WT-DC-07-002, a sample was collected from a pre-existing concrete structure located immediately south of Area 07 as a means to establish disposal requirements for this material. Analytical data associated with the disposal characterization samples is discussed in Section 2 and is presented in Attachment No. 5.

1.2.8 Confirmatory Sampling

A total of 100 confirmatory soil samples (47 composite samples and 53 grab samples) were collected from the Lower Pond, the Oil/Water Separator and the Upper Pond during this reporting period. The confirmatory samples were collected and analyzed in accordance with the Remedial Action Work Plan. Analytical data associated with the confirmatory samples are discussed in Section 2 and are presented in Attachment No. 2.

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2. DATA PRESENTATION

In previous sections of this progress report, mention has been made to the collection and analysis of a variety of samples. This section presents a summary of the analytical data received during this reporting period. The section is formatted to present the analytical data in the order in which it is provided in the attachments.

Attachment No. 2 Confirmatory Soil Sampling Analytical Data: During the period from April 1, 2002 to June 30, 2002, numerous confirmatory soil samples were obtained from throughout the remedial excavation surfaces within the Lower Pond, the Oil/Water Separator and the Upper Pond. Drawings 1 through 3 in Attachment No. 2 present the general limits of remedial excavation and the areas within which confirmatory samples were collected. Detailed drawings exhibiting the actual excavation contours and sample locations will be provided in the final summary report.

In accordance with the RAWP, both grab and composite confirmatory sampling was performed throughout the remediation process. Grab sampling is intended to demonstrate compliance with the State of Connecticut Remediation Standard Regulation for PCBs and other constituents of concern, which includes metals, VOCs, SVOCs, TPH and cyanide. Composite sampling is intended to demonstrate compliance with the remedial objective of 25 ppm PCBs within the areas designated for capping.

For ease in assessing this data, the composite analytical data is presented separately from the grab sample data. A summary of the sampling and analytical information for the final confirmatory soil grab samples is provided as Table 1 in Attachment No. 2 and a summary of the constituents detected is presented as Table 2. A summary of the sampling and analytical information for the final confirmatory soil composite samples is provided as Table 3 in Attachment No. 2 and a summary of the constituents detected is presented as Table 4.

In some cases, the confirmatory soil samples obtained for compliance demonstration exceeded the applicable criteria. For those instances for which exceedances were located within the remediation project limits, the respective areas were re-excavated and resampled. The analytical data representing the excavated soil is not included in the above referenced data sets as the representative soil has been excavated and disposed of at an off-site facility. The limits of excavation completed to date are, however at or beyond the limits defined for this project in the RAWP. As such, the data set in Attachment No. 2 is the final data set for this particular progress report.

Attachment No. 3 Dewatering Wastewater Analytical Data: As previously stated, the system for dewatering activities in the Stream Channel and Wetlands was shutdown on April 3, 2002. Discharge from the Lower Pond dewatering activities was initiated on April 8, 2002. In accordance with the EA, this discharge was monitored on a weekly basis for the presence of VOCs and PCBs. An exceedance of the applicable pollutant limits was encountered during the

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compliance monitoring performed on April 25, 2002. Upon receipt of the analytical data on May 1, 2002 the system was immediately shutdown and discharge ceased. As a result, mitigative measures were implemented on the treatment system and the system was restarted on May 4, 2002. A copy of the letter notifying CT DEP of the exceedance and subsequent shutdown of the treatment system is provided as Attachment No. 4.

Though not required by the permit, analysis for zinc was also performed until May 18, 2002, to assess if the discharge could be routed directly to Willow Brook, rather than to the Colt Street facility. The concentration of zinc in the effluent from the dewatering system was consistently in excess of the limits for discharge to Willow Brook. As such, the discharge continued to be routed to the Colt Street facility in accordance with the terms and conditions of the EA. The use of this system was temporarily discontinued on June 4, 2002.

A summary of the sampling and analytical information for compliance monitoring is presented as Table 1 in Attachment No. 3. A summary of the constituents detected in the combined effluent is provided as Table 2 in Attachment No. 3.

Attachment No. 4 EA Exceedance Notification: As described above, an exceedance of the EA limits was encountered during the April 25, 2002 monitoring event. A copy of the notification letter forwarded to the CT DEP is included in Attachment No. 4. This document details the corrective measures implemented to mitigate future exceedances.

Attachment No. 5 Disposal Characterization Sampling Analytical Data: A summary of the single disposal characterization sample collected during this reporting period is provided as Table 1 in Attachment No. 5. A summary of the constituents detected in the disposal characterization sample is provided as Table 2 in Attachment No. 5.

The sludge sample was collected from a pre-existing concrete structure within Remediation Area 07. The sample was analyzed for PCBs, VOCs (zero head extraction method), metals (TCLP), reactivity, corrosivity and ignitability, for the purposes of verifying disposal requirements for the materials. The sample was found to contain elevated levels of PCBs at 1,050 ppm and trace levels of TCLP metals including barium, chromium (total), and lead.

3. REMEDIAL ACTION WORK PLAN

During this reporting period, DEP issued an approval of the Revised Remedial Action Work Plan dated January 2002.

4. PLANNED ACTIVITIES

Planned activities during the next reporting period from July 2002 through the completion of the project include:

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- Completion of the soil relocation to the engineered control area.
- Preparation of the Oil/Water Separator Area for capping.
- Restoring the Oil/Water Separator Area with 3' of fill over the cap including top soil, seed and mulch.
- Requesting authorization for alternative decontamination procedure for the sheeting through EPA.
- Requesting CT DEP authorization to modify the EA treatment process to facilitate the pre-treatment of the decontamination wastewater with discharge to the Colt Street Treatment facility.
- Decontamination of the sheeting and heavy equipment departing from the site.
- Completing installation of the perimeter fence.

Construction activities will be completed by June 28, 2002. Miscellaneous landscaping and demobilization of construction equipment will continue into the month of July 2002.

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Attachment No. 1

Site Plan

**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100460

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-9

Purpose of Target Sheet:

☒ **Oversized** (in Site File) ☐ **Oversized** (in Map Drawer)

☐ **Page(s) Missing** (Please Specify Below)

☐ **Privileged** ☐ **Other** (Provide
Purpose Below)

Description of Oversized Material, if applicable:

ATTACHMENT NO. 1: SITE PLAN

☒ **Map** ☐ **Photograph** ☐ **Other** (Specify Below)

*** Please Contact the EPA New England RCRA Records Center to View This Document ***

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PRATT & WHITNEY DIVISION
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**Attachment No. 2
Confirmatory Soil Sampling Analytical Data
and Excavation Limits and Sample Location Maps**

Table 1

SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEA Volatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WT-CS-01-001	2002372	04/11/2002		SS		x	x			X	X	x
WT-CS-01-002	2002373	04/11/2002		SS		x	X			X	X	X
WT-CS-01-003	2002374	04/11/2002		SS		x	X			X	X	X
WT-CS-01-004	2002375	04/11/2002		SS		x	X			X	X	X
WT-CS-02-068	2002368	04/09/2002		SS		x	X			X	X	X
WT-CS-02-070	2002370	04/09/2002		SS		x	X			X	X	X
WT-CS-02-071	2002384	04/11/2002		SS						X		
WT-CS-02-073	2002379	04/11/2002		SS						x		
WT-CS-02-075	2002381	04/11/2002		SS						x	x	
WT-CS-02-077	2002383	04/11/2002		SS						X		
WT-CS-04-118	2002391	04/17/2002		SS			X			X		
WT-CS-04-120	2002393	04/17/2002		SS			x			x		x
WT-CS-04-122	2002395	04/17/2002		SS			X			X		x
WT-CS-04-124	2002399	04/22/2002		SS						x		
WT-CS-07-001	2002385	04/17/2002		SS		x	X			X	X	X
WT-CS-07-002	2002386	04/17/2002		SS		x	X			X	X	X
WT-CS-07-003	2002387	04/17/2002		SS		x	X			X	X	X
WT-CS-07-004	2002388	04/17/2002		SS		x	X			X	X	x
WT-CS-07-005	2002389	04/17/2002		SS		x	X			x	X	x
WT-CS-07-006	2002401	04/24/2002		SS						X		
WT-CS-07-007	2002402	04/24/2002		SS						x		
WT-CS-07-008	2002403	04/24/2002		SS						X		
WT-CS-07-009	2002404	04/24/2002		SS						X		
WT-CS-07-011	2002433	05/24/2002		SS		x	x			x	X	x
WT-CS-07-013	2002437	05/28/2002		SS		x	X			x	X	x
WT-CS-07-015	2002441	05/29/2002		SS		X	X			X	X	X
WT-CS-07-017	2002443	05/29/2002		SS		X	X			X	X	X
WT-CS-07-017	2002444	05/29/2002		SS		X	X			X	X	X
WT-CS-07-019	2002446	05/29/2002		SS		x	X			X	X	X
WT-CS-07-021	2002448	05/29/2002		SS		x	x			X	X	X
WT-CS-07-023	2002450	05/29/2002		SS		X	X			X	X	X
WT-CS-07-026	2002460	05/30/2002		SS		x	X			x	X	x
WT-CS-07-028	2002462	05/30/2002		SS		x	x			x	X	x

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected
 Printed on 06/17/2002

**Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data**

Loureiro Engineering Associates, Inc.

[illegible]

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

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Printed on 06/17/2002

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-01-001	WT-CS-01-002	WT-CS-01-003	WT-CS-01-004	WT-CS-02-068	WT-CS-02-070	WT-CS-02-071
	Sample ID	2002372	2002373	2002374	2002375	2002368	2002370	2002384
	Sample Date	04/11/2002	04/11/2002	04/11/2002	04/11/2002	04/09/2002	04/09/2002	04/11/2002
	Sample Time	10:00	10:05	10:15	10:25	15:15	15:25	15:50
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204503-1A	E204503-2A	E204503-3A	E204503-4A	E204450-3A	E204450-5A	E204529-8
Constituent	Units							
Date PCBs Analyzed	-	04/11/2002	04/12/2002	04/11/2002	04/12/2002	04/11/2002	04/11/2002	04/12/2002
Date Metals Analyzed	-	04/16/2002	04/16/2002	04/16/2002	04/16/2002	04/12/2002	04/12/2002	
Date Organics Analyzed	-							
Date Physical Analyzed	-		04/12/2002	04/12/2002	04/12/2002	04/11/2002	04/11/2002	
Date Semi-volatile Organics Analyzed	-		04/16/2002	04/15/2002	04/15/2002	04/15/2002	04/16/2002	
Arsenic	mg/kg	1.6	2.2	4.3	3.0	5.2	14	
Barium	mg/kg	11	34	51	39	320 J	480 J	
Cadmium	mg/kg		5.9	8.9	2.7	45	100	
Chromium, Total	mg/kg	6.4	130	210	78	1000 J	3100 J	
Copper	mg/kg	5.5	54	75	40	300 J	2700 J	
Lead	mg/kg	2.3	74	140	51	490 J	980 J	
Mercury	mg/kg		0.76	0.44	0.26	4.6 J	13 J	
Nickel	mg/kg	14	140	140	57	1400 J	1900 J	
Selenium	mg/kg							
Silver	mg/kg		3.5	4.5	1.5	33	99	
Zinc	mg/kg	11	65	90	50	330 J	790 J	
PCB-1248 (Arochlor 1248)	ug/kg		110000				98000	
PCB-1254 (Arochlor 1254)	ug/kg	120 J	110000	17000	4800	58000	64000	180
PCB-1260 (Arochlor 1260)	ug/kg							
Cyanide	mg/kg		1.7			9.3 J	11 J	
Total Petroleum Hydrocarbons EPA 418.1	mg/kg		22000	740	450	82000 J	51000 J	
2-Methylnaphthalene	ug/kg					3800		
Acenaphthene	ug/kg		760				9700	
Anthracene	ug/kg						17000	
Benzo(a)anthracene	ug/kg		1700	740	690		40000	
Benzo(a)pyrene	ug/kg		1300	790	730		30000	
Benzo(b)fluoranthene	ug/kg		1200	1200	1000		47000	
Benzo(g,h,i)perylene	ug/kg			360	270		8800	
Benzo(k)fluoranthene	ug/kg		1300	420	400		14000	



Loureiro Engineering Associates, Inc.

[illegible]

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-02-077	WT-CS-04-118	WT-CS-04-122	WT-CS-07-001	WT-CS-07-002	WT-CS-07-003	WT-CS-07-004
	Sample ID	2002383	2002391	2002395	2002385	2002386	2002387	2002388
	Sample Date	04/11/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002
	Sample Time	15:45	11:15	11:50	09:30	10:00	10:30	10:40
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204529-7	E204704-7	E204704-11	E204704-1A	E204704-2A	E204704-3A	E204704-4A
Constituent	Units							
Date PCBs Analyzed	-	04/12/2002	04/17/2002	04/17/2002	04/17/2002	04/17/2002	04/18/2002	04/18/2002
Date Metals Analyzed	-				04/19/2002	04/19/2002	04/19/2002	04/19/2002
Date Organics Analyzed	-							
Date Physical Analyzed	-				04/19/2002	04/19/2002	04/19/2002	
Date Semi-volatile Organics Analyzed	-		04/20/2002	04/20/2002	04/20/2002	04/20/2002	04/20/2002	04/20/2002
Arsenic	mg/kg				2.4 J	2.5 J	2.5 J	3.6 J
Barium	mg/kg				38	30	32	34
Cadmium	mg/kg				0.75	0.52	0.87	0.51
Chromium, Total	mg/kg				37	30	65	170
Copper	mg/kg				22	19	49	41
Lead	mg/kg				27 J	23 J	45 J	44 J
Mercury	mg/kg				0.30	0.16	0.20	0.15
Nickel	mg/kg				16	13	19	16
Selenium	mg/kg							
Silver	mg/kg				0.84	0.52	1.0	2.0
Zinc	mg/kg				39	33	50	40
PCB-1248 (Arochlor 1248)	ug/kg		490		1600	870	4900	18000
PCB-1254 (Arochlor 1254)	ug/kg	16000	780	63	1900 J	1400	1600	5300
PCB-1260 (Arochlor 1260)	ug/kg		190		830	500	430	1200
Cyanide	mg/kg							
Total Petroleum Hydrocarbons EPA 418.1	mg/kg				600	300	320	
2-Methylnaphthalene	ug/kg							
Acenaphthene	ug/kg							
Anthracene	ug/kg		270				450	360
Benzo(a)anthracene	ug/kg		670	390		340	950	910
Benzo(a)pyrene	ug/kg		660	410		330	960	920
Benzo(b)fluoranthene	ug/kg		870	540		420	1200	1200
Benzo(g,h,i)perylene	ug/kg		190				330	360
Benzo(k)fluoranthene	ug/kg		290				430	370

**Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data**

Loureiro Engineering Associates, Inc.

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-07-005	WT-CS-07-006	WT-CS-07-008	WT-CS-07-009	WT-CS-07-011	WT-CS-07-013	WT-CS-07-015
	Sample ID	2002389	2002401	2002403	2002404	2002433	2002437	2002441
	Sample Date	04/17/2002	04/24/2002	04/24/2002	04/24/2002	05/24/2002	05/28/2002	05/29/2002
	Sample Time	13:00	11:30	12:10	12:25	16:55	13:20	11:36
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E204704-5A	E204946-1	E204946-3	E204946-4	E205B11-2A	E205B21-3A	E205B64-3A
Constituent	Units							
Date PCBs Analyzed	-		04/25/2002	04/25/2002	04/25/2002			05/30/2002
Date Metals Analyzed	-	04/19/2002				05/30/2002	05/30/2002	05/30/2002
Date Organics Analyzed	-							
Date Physical Analyzed	-							05/30/2002
Date Semi-volatile Organics Analyzed	-	04/20/2002					05/29/2002	06/03/2002
Arsenic	mg/kg							1.7
Barium	mg/kg	17				6.7	6.5	41
Cadmium	mg/kg							4.5
Chromium, Total	mg/kg	5.3				3.2	4.4	2600
Copper	mg/kg	5.7				2.0	2.3	550
Lead	mg/kg	4.4 J				0.96	1.0	230
Mercury	mg/kg							0.21
Nickel	mg/kg	8.3				3.6	3.4	25
Selenium	mg/kg							
Silver	mg/kg							0.72
Zinc	mg/kg	12				5.1	7.0	47
PCB-1248 (Arochlor 1248)	ug/kg							
PCB-1254 (Arochlor 1254)	ug/kg		62	140	22000			12000
PCB-1260 (Arochlor 1260)	ug/kg							
Cyanide	mg/kg							
Total Petroleum Hydrocarbons EPA 418.1	mg/kg							33000
2-Methylnaphthalene	ug/kg							49000
Acenaphthene	ug/kg							180000
Anthracene	ug/kg							
Benzo(a)anthracene	ug/kg							65000
Benzo(a)pyrene	ug/kg							
Benzo(b)fluoranthene	ug/kg							
Benzo(g,h,i)perylene	ug/kg							
Benzo(k)fluoranthene	ug/kg							



Loureiro Engineering Associates, Inc.

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-07-015	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-017	WT-CS-07-019	WT-CS-07-021
	Sample ID	2002441	2002443	2002443	2002444	2002444	2002446	2002448
	Sample Date	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002	05/29/2002
	Sample Time	11:36	11:46	11:46	11:48	11:48	11:59	13:00
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E205B64-3B	E205B64-5A	E205B64-5B	E205B64-6A	E205B64-6B	E205B64-8A	E205B64-10A
Constituent	Units							
Date PCBs Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002
Date Metals Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002
Date Organics Analyzed	-	05/30/2002		05/30/2002		05/30/2002		
Date Physical Analyzed	-		05/30/2002		05/30/2002		05/30/2002	05/30/2002
Date Semi-volatile Organics Analyzed	-		06/01/2002		06/04/2002		06/01/2002	
Arsenic	mg/kg		0.74		0.61		0.96	
Barium	mg/kg		18		17		27	25
Cadmium	mg/kg						0.64	6.2
Chromium, Total	mg/kg		12		9.6		83	52000
Copper	mg/kg		6.4		6.0		28	8400
Lead	mg/kg		4.6		3.2		22	2700
Mercury	mg/kg						0.20	0.065
Nickel	mg/kg		48		48		16	150
Selenium	mg/kg							
Silver	mg/kg						1.0	5.2
Zinc	mg/kg		50		51		26	
PCB-1248 (Arochlor 1248)	ug/kg		31000 J		53000 J		57000	
PCB-1254 (Arochlor 1254)	ug/kg		30000 J		54000 J		51000	4000
PCB-1260 (Arochlor 1260)	ug/kg		4300 J		7500 J		9300	
Cyanide	mg/kg							7.3
Total Petroleum Hydrocarbons EPA 418.1	mg/kg		20000		31000		32000	7700
2-Methylnaphthalene	ug/kg		8600		26000			
Acenaphthene	ug/kg		5500		11000			
Anthracene	ug/kg				2100			
Benzo(a)anthracene	ug/kg		2100		3300		2900	
Benzo(a)pyrene	ug/kg				1900			
Benzo(b)fluoranthene	ug/kg				2400		3100	
Benzo(g,h,i)perylene	ug/kg							
Benzo(k)fluoranthene	ug/kg						2400	



Loureiro Engineering Associates, Inc.

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-07-023	WT-CS-07-023	WT-CS-07-026	WT-CS-07-028	WT-CS-07-030	WT-CS-07-031	WT-CS-07-032
	Sample ID	2002450	2002450	2002460	2002462	2002498	2002499	2002500
	Sample Date	05/29/2002	05/29/2002	05/30/2002	05/30/2002	06/10/2002	06/10/2002	06/10/2002
	Sample Time	13:09	13:09	14:10	14:22	13:00	13:10	13:20
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E205B64-12A	E205B64-12B	E205C78-2A	E205C78-4A	E206406-1A	E206406-2A	E206406-3A
Constituent	Units							
Date PCBs Analyzed	-	05/30/2002				06/11/2002	06/11/2002	06/11/2002
Date Metals Analyzed	-	05/30/2002		06/04/2002	06/04/2002	06/13/2002	06/13/2002	06/13/2002
Date Organics Analyzed	-		05/30/2002					
Date Physical Analyzed	-	05/30/2002				06/13/2002		
Date Semi-volatile Organics Analyzed	-	06/03/2002		06/03/2002		06/13/2002	06/13/2002	06/13/2002
Arsenic	mg/kg	8.1						
Barium	mg/kg	32		14 J	8.0 J	23	14	16
Cadmium	mg/kg	12				0.78	0.32	0.24
Chromium, Total	mg/kg	10000		4.3	3.3	31	17	13
Copper	mg/kg	2900		1.0	1.5	25	16	8.8
Lead	mg/kg	680		1.1	1.0	15	7.9	6.1
Mercury	mg/kg	0.19				0.50	0.40	0.13
Nickel	mg/kg	6500		2.7	3.7	25	26	19
Selenium	mg/kg							
Silver	mg/kg	30				1.3	0.50	0.14
Zinc	mg/kg	120		3.3	4.1	43	20	18
PCB-1248 (Arochlor 1248)	ug/kg					640	250	
PCB-1254 (Arochlor 1254)	ug/kg	250000				820	420	410
PCB-1260 (Arochlor 1260)	ug/kg					210	130	
Cyanide	mg/kg	10						
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	58000				320		
2-Methylnaphthalene	ug/kg							
Acenaphthene	ug/kg							
Anthracene	ug/kg					220		
Benzo(a)anthracene	ug/kg					940	620	
Benzo(a)pyrene	ug/kg					780	590	
Benzo(b)fluoranthene	ug/kg					800	580	
Benzo(g,h,i)perylene	ug/kg					480	390	
Benzo(k)fluoranthene	ug/kg					700	580	



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Table 2

SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-07-033	WT-CS-09-067	WT-CS-09-069	WT-CS-09-071	WT-CS-09-077	WT-CS-09-077	WT-CS-09-079
	Sample ID	2002501	2002408	2002410	2002412	2002464	2002464	2002466
	Sample Date	06/10/2002	05/22/2002	05/22/2002	05/22/2002	05/30/2002	05/30/2002	05/30/2002
	Sample Time	13:30	13:12	13:17	13:23	14:45	14:45	14:53
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E206406-4A	E205928-2A	E205928-4A	E205928-6A	E205C73-2A	E205C73-2B	E205C73-4A
Constituent	Units							
Date PCBs Analyzed	-	06/11/2002		05/23/2002	05/23/2002	06/03/2002		06/03/2002
Date Metals Analyzed	-	06/13/2002	05/24/2002	05/24/2002	05/24/2002	06/04/2002		06/04/2002
Date Organics Analyzed	-						06/02/2002	
Date Physical Analyzed	-	06/13/2002		05/23/2002	05/23/2002	06/04/2002		06/04/2002
Date Semi-volatile Organics Analyzed	-	06/13/2002		05/24/2002	05/24/2002	06/04/2002		06/03/2002
Arsenic	mg/kg			7.2	6.5	5.3		2.0
Barium	mg/kg	26	7.5	55	960	58		37
Cadmium	mg/kg	0.56		4.8	97	18		260
Chromium, Total	mg/kg	21	4.9	950	3100	27000		100000
Copper	mg/kg	15	1.1	120	1400	4000		19000
Lead	mg/kg	19	1.1	110	1300	3300		2300
Mercury	mg/kg	0.24		0.66	51	2.2		0.099
Nickel	mg/kg	34	2.7	100	1500	3400		6200
Selenium	mg/kg				3.0			
Silver	mg/kg	0.88		16	150	49		29
Zinc	mg/kg	24	3.8	84	1300	140		
PCB-1248 (Arochlor 1248)	ug/kg			9400	280000			
PCB-1254 (Arochlor 1254)	ug/kg	690		9300	290000	140000		1200
PCB-1260 (Arochlor 1260)	ug/kg	170		2900	44000			
Cyanide	mg/kg				10	25		21
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	220		12000	170000	77000		3000
2-Methylnaphthalene	ug/kg				29000			
Acenaphthene	ug/kg					39000		1800
Anthracene	ug/kg	1800		5200		70000		
Benzo(a)anthracene	ug/kg	7400		13000		90000		
Benzo(a)pyrene	ug/kg	6200		10000		59000		
Benzo(b)fluoranthene	ug/kg	6800		8800		60000		
Benzo(g,h,i)perylene	ug/kg	3600		7000				
Benzo(k)fluoranthene	ug/kg	5000		7900		58000		

**Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data**

Loureiro Engineering Associates, Inc.

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Table 2

SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-09-081	WT-CS-09-083	WT-CS-09-085	WT-CS-09-087	WT-CS-09-089	WT-CS-09-091	WT-CS-09-091
	Sample ID	2002468	2002470	2002472	2002474	2002476	2002478	2002479
	Sample Date	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002	05/30/2002
	Sample Time	15:06	15:20	15:36	15:46	16:14	16:51	16:53
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E205C73-6A	E205C73-8A	E205C73-10A	E205C73-12A	E205C73-14A	E205C73-16A	E205C73-17A
Constituent	Units							
Date PCBs Analyzed	-	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/03/2002	06/04/2002	06/03/2002
Date Metals Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002
Date Organics Analyzed	-							
Date Physical Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/04/2002
Date Semi-volatile Organics Analyzed	-		06/04/2002	06/04/2002	06/04/2002	06/04/2002	06/05/2002	06/04/2002
Arsenic	mg/kg	1.9	4.5		5.5	1.0	1.1	1.1
Barium	mg/kg	39	67	30	84	32	18	18
Cadmium	mg/kg	330	160	360	8.1	0.49	0.19	0.29
Chromium, Total	mg/kg	120000	86000	82000	690	68	9.0	11
Copper	mg/kg	18000	16000	20000	160	24	8.6	9.8
Lead	mg/kg	4700	2400	700	280	46	8.4	8.8
Mercury	mg/kg	0.096	0.22	0.098	3.2	0.18	0.024	0.032
Nickel	mg/kg	7300	9500	5800	210	15	8.9	14
Selenium	mg/kg							
Silver	mg/kg	68	30	28	45			0.60
Zinc	mg/kg		11		160	81	16	17
PCB-1248 (Arochlor 1248)	ug/kg				56000			
PCB-1254 (Arochlor 1254)	ug/kg	3600	1000	48000	85000	150	1300 J	250 J
PCB-1260 (Arochlor 1260)	ug/kg				37000		340 J	
Cyanide	mg/kg	4.2	12	14	1.8			
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	57000	5500	24000	53000	520	430	380
2-Methylnaphthalene	ug/kg							
Acenaphthene	ug/kg		1300					
Anthracene	ug/kg		500					
Benzo(a)anthracene	ug/kg		860		6200		420	420
Benzo(a)pyrene	ug/kg		770				420	440
Benzo(b)fluoranthene	ug/kg		680				370	360
Benzo(g,h,i)perylene	ug/kg		480				290	310
Benzo(k)fluoranthene	ug/kg		630				340	350



Loureiro Engineering Associates, Inc.

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Table 2

SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Loureiro Engineering Associates, Inc.

	Location ID	WT-CS-09-093	WT-CS-09-095	WT-CS-09-097	WT-CS-09-099			
	Sample ID	2002481	2002483	2002485	2002487			
	Sample Date	05/30/2002	05/30/2002	05/30/2002	05/30/2002			
	Sample Time	17:05	17:21	17:26	17:36			
	Laboratory	PREM	PREM	PREM	PREM			
	Lab. Number	E205C82-2A	E205C82-4A	E205C82-6A	E205C82-8A			
Constituent	Units							
Date PCBs Analyzed	-	05/31/2002	06/03/2002		06/01/2002			
Date Metals Analyzed	-	06/04/2002	06/04/2002	06/04/2002	06/04/2002			
Date Organics Analyzed	-							
Date Physical Analyzed	-	06/04/2002	06/04/2002		06/04/2002			
Date Semi-volatile Organics Analyzed	-	06/04/2002	06/05/2002	06/04/2002	06/05/2002			
Arsenic	mg/kg	2.7	2.0		1.8			
Barium	mg/kg	29	28	22	66			
Cadmium	mg/kg	0.86	0.72		5.8			
Chromium, Total	mg/kg	55	86	6.7	300			
Copper	mg/kg	27	26	9.3	100			
Lead	mg/kg	41	21	5.7	180			
Mercury	mg/kg	0.19	0.16	0.028	2.8			
Nickel	mg/kg	20	14	8.4	100			
Selenium	mg/kg							
Silver	mg/kg	1.2	0.66		24			
Zinc	mg/kg	44	51	14	140			
PCB-1248 (Arochlor 1248)	ug/kg							
PCB-1254 (Arochlor 1254)	ug/kg	720	260		7800			
PCB-1260 (Arochlor 1260)	ug/kg	260						
Cyanide	mg/kg							
Total Petroleum Hydrocarbons EPA 418.1	mg/kg	290	5400		2000			
2-Methylnaphthalene	ug/kg		600					
Acenaphthene	ug/kg							
Anthracene	ug/kg	250	710		1900			
Benzo(a)anthracene	ug/kg	840	1100	240	8000			
Benzo(a)pyrene	ug/kg	800	970	220	7900			
Benzo(b)fluoranthene	ug/kg	880	840		7500			
Benzo(g,h,i)perylene	ug/kg	260	580		5400			
Benzo(k)fluoranthene	ug/kg	740	900		7400			



Loureiro Engineering Associates, Inc.

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Table 3



SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling
Data

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEA Volatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WT-CS-02-066	2002366	04/09/2002		SSC						X		
WT-CS-02-067	2002367	04/09/2002		SSC						X		
WT-CS-02-069	2002369	04/09/2002		SSC						X		
WT-CS-02-071	2002377	04/11/2002		SSC						X		
WT-CS-02-072	2002378	04/11/2002		SSC						X		
WT-CS-02-074	2002380	04/11/2002		SSC						X		
WT-CS-02-076	2002382	04/11/2002		SSC						X		
WT-CS-04-117	2002390	04/17/2002		SSC						X		
WT-CS-04-119	2002392	04/17/2002		SSC						X		
WT-CS-04-121	2002394	04/17/2002		SSC						X		
WT-CS-04-123	2002397	04/22/2002		SSC						x		
WT-CS-04-123	2002398	04/22/2002		SSC						x		
WT-CS-07-010	2002432	05/24/2002		SSC						X		
WT-CS-07-012	2002435	05/28/2002		SSC						x		
WT-CS-07-012	2002436	05/28/2002		SSC						x		
WT-CS-07-014	2002440	05/29/2002		SSC						X		
WT-CS-07-016	2002442	05/29/2002		SSC						X		
WT-CS-07-018	2002445	05/29/2002		SSC						X		
WT-CS-07-020	2002447	05/29/2002		SSC						X		
WT-CS-07-022	2002449	05/29/2002		SSC						X		
WT-CS-07-024	2002455	05/30/2002		SSC						x		
WT-CS-07-025	2002459	05/30/2002		SSC						x		
WT-CS-07-027	2002461	05/30/2002		SSC						x		
WT-CS-08-043	2002406	05/20/2002		SSC						x		
WT-CS-08-044	2002420	05/23/2002		SSC						X		
WT-CS-08-045	2002421	05/23/2002		SSC						X		
WT-CS-09-065	2002405	05/17/2002		SSC						x		
WT-CS-09-066	2002407	05/22/2002		SSC						X		
WT-CS-09-068	2002409	05/22/2002		SSC						X		
WT-CS-09-070	2002411	05/22/2002		SSC						X		
WT-CS-09-072	2002439	05/29/2002		SSC						x		
WT-CS-09-073	2002452	05/30/2002		SSC						x		
WT-CS-09-074	2002453	05/30/2002		SSC						x		

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

Printed on 06/17/2002

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Loureiro Engineering Associates, Inc.

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SUMMARY OF ANALYTICAL RESULTS (DETECTS)



Loureiro Engineering Associates, Inc.

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Loureiro Engineering Associates, Inc.

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Loureiro Engineering Associates, Inc.

SUMMARY OF ANALYTICAL RESULTS (DETECTS)

Pratt & Whintey, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

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Loureiro Engineering Associates, Inc.

Data

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**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100460

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-9

Purpose of Target Sheet:

☒ **Oversized (in Site File)** ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged** ☐ **Other (Provide
Purpose Below)**

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 2 SHEET 1: UPPER POND AREAS OF
REMEDIAL INVESTIGATION AND SAMPLING**

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

*** Please Contact the EPA New England RCRA Records Center to View This Document ***

**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100460

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-9

Purpose of Target Sheet:

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Purpose Below)

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 2 SHEET 2: LOWER POND AREAS OF
REMEDIAL INVESTIGATION AND SAMPLING**

☒ **Map** ☐ **Photograph** ☐ **Other** (Specify Below)

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**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100460

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-9

Purpose of Target Sheet:

☒ **Oversized** (in Site File) ☐ **Oversized** (in Map Drawer)

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Purpose Below)

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 2 SHEET 3: WETLANDS/STREAM
CHANNEL AREAS OF REMEDIAL INVESTIGATION AND
SAMPLING**

☒ **Map** ☐ **Photograph** ☐ **Other** (Specify Below)

*** Please Contact the EPA New England RCRA Records Center to View This Document ***

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002**

**Attachment No. 3
Dewatering Wastewater Analytical Data**



Loureiro Engineering Associates, Inc.

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**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002**

**Attachment No. 4
DEP Notification Regarding
Dewatering Wastewater Treatment System**

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney
A United Technologies Company

May 2, 2002

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127**

Attn: Don Gonyea, Authorization Coordinator

**RE: Emergency Authorization No. EA0100182R
United Technologies Corp., Pratt & Whitney Division
East Hartford, Connecticut**

Dear Mr. Gonyea:

In accordance with VI. B.5) (b) of the above referenced Emergency Authorization (EA), Pratt & Whitney is herein notifying the State of Connecticut Department of Environmental Protection, Bureau of Water Management that an exceedance of the applicable pollutant limits defined in the EA was encountered during the compliance monitoring performed on April 25, 2002. The referenced EA authorizes discharge to the Pratt & Whitney, Colt Street treatment system approved through NPDES Permit No. CT0001376 or directly to Willow Brook. The discharge during this exceedance was directed through the Colt Street treatment facility.

The associated sampling was performed on April 25, 2002 and the analytical data was validated at 11:55 am on May 1, 2002. Upon receipt of the preliminary laboratory data on Monday, April 29 at 4:00 pm, the system was immediately shutdown and discharge ceased. An exceedance was encountered for total PCBs as follows:

<u>Detected Constituents</u>	<u>Concentration Detected (ug/l)</u>	<u>EA Limit (ug/l)</u>
Total PCBs	11.6	0.5

Pursuant to the above referenced requirements, upon validation of the analytical data through the laboratory, verbal notification was immediately made by George Andrews of Loureiro Engineering Associates to you via telephone on May 1, 2002 at approximately 2:40 pm.

The subject discharge was previously sampled on April 15, 2002. No PCBs were detected during this sampling event as reflected in the respective DMR. On April 19, 2002, the groundwater extraction system and related treatment system were shut down to facilitate

DEP
May 2, 2002
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mechanical and operational logistics at the site. The system was restarted on April 25, 2002. The above analytical data reflects the system restart sampling.

As discussed during your telephone conversation with Mr. Andrews, mitigative measures will be implemented on the treatment system consisting of the installation of a multi-media filtration unit that will be placed after the existing settling/filtration/air stripping processes. The multi-media filtration unit will consist of 4 - 2,000 +/- lb vessels with carbon, anthracite, and bentonite, which will be in place prior to the discharge to the Colt Street treatment facility. In addition and in accordance with your discussion with Mr. Andrews, the treatment system will be evaluated for bacterial growth, and if necessary, may be disinfected using an adequate concentration of a select oxidizer to mitigate the potential for bacterial carry-over through the treatment system. Details associated with the disinfection process will be finalized and communicated to the Department prior to initializing any activities.

Upon completion of the above measures, sampling in accordance with VI. B.4)(c) of the above referenced EA will immediately be performed upon restart the treatment system.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.

Sincerely,



Lorin S. Sodell
Chief Manufacturing Engineer
Director of Facilities & Services

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 4, JUNE 2002**

Attachment No. 5

Disposal Characterization Sampling Analytical Data



Loureiro Engineering Associates, Inc.

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SUMMARY OF ANALYTICAL RESULTS (DETECTS)

Data



Loureiro Engineering Associates, Inc.

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